

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL SEARCHING AUTHORITY

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

To:
LADAS & PARRY
Attn. WEST, P.
26 West 61st Street
NEW YORK, NY 10023-7604
UNITED STATES OF AMERICA

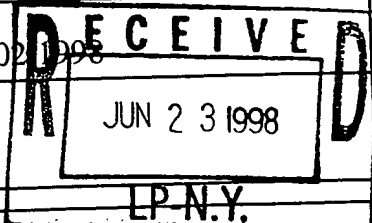
Date of mailing
(day/month/year) 17/06/1998

Applicant's or agent's file reference
33536

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US 98/03905

International filing date
(day/month/year) 27/02/1998



Applicant

PHILLIPS PETROLEUM COMPANY

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority
European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040; Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Patrick Gehl

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GENERAL

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 33536	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/US 98/ 03905	International filing date (day/month/year) 27/02/1998	(Earliest) Priority Date (day/month/year) 27/02/1997
Applicant PHILLIPS PETROLEUM COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).

2. ☐ Unity of invention is lacking (see Box II).

3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

☐ filed with the international application.
☐ furnished by the applicant separately from the international application,

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ Transcribed by this Authority

4. With regard to the title, ☒ the text is approved as submitted by the applicant
☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract, ☒ the text is approved as submitted by the applicant
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:
 Figure No. ---

☐ as suggested by the applicant. ☐ None of the figures.
☐ because the applicant failed to suggest a figure.
☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/03905

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 B01J23/44 B01J23/56 B01J23/58

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1 018 661 A (BRITISH PETROLEUM) 26 January 1966	1, 2, 6, 7, 12, 13, 15
Y	see examples 2-4	1, 2, 14, 16
Y	US 4 484 015 A (JOHNSON MARVIN M ET AL) 20 November 1984 cited in the application see abstract	1, 2, 14, 16
X	US 4 337 329 A (KUBO YOICHIRO ET AL) 29 June 1982 see claims see example 4	1-5, 7-13, 15-18

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 June 1998

Date of mailing of the international search report

17/06/1998

Name and mailing address of the ISA

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NL - 2280 HV Rijswijk
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Authorized officer

Faria, C

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 98/03905

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 4 504 593 A (TRINH DINH CHAN ET AL) 12 March 1985 see claims see examples 1-6</p> <p>-----</p>	<p>1,7-13, 15-18</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/03905

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 1018661 A		NONE	
US 4484015 A	20-11-1984	US 4404124 A CA 1172233 A EP 0064301 A	13-09-1983 07-08-1984 10-11-1982
US 4337329 A	29-06-1982	JP 1574878 C JP 56081305 A JP 63035641 B JP 1544738 C JP 56081306 A JP 63035642 B CA 1163750 A DE 3046008 A	20-08-1990 03-07-1981 15-07-1988 15-02-1990 03-07-1981 15-07-1988 13-03-1984 03-09-1981
US 4504593 A	12-03-1985	FR 2539647 A DE 3402321 A JP 59142850 A	27-07-1984 02-08-1984 16-08-1984